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IN THE CLAIMS

Please amend claim 9, and add claims 18-24 as follows:

1. (ORIGINAL) A system for measuring phase noise, comprising:
a tuner for tuning a signal from a device and converting the signal to a baseband signal;
at least one analog-to-digital converter (ADC) for capturing data from the baseband signal;
a timing processor for acquiring and tracking symbol timing of the captured data of the baseband signal;
a carrier processor for determining unwrapped phase history data from the tracked symbol timing;
a line fitting processor for determining a linear phase by fitting a straight line to the unwrapped phase history data; and
a subtractor for subtracting the linear phase from the phase history data to produce a residual phase of the carrier.
2. (ORIGINAL) The system of claim 1, further comprising a fast Fourier transform (FFT) processor for determining a phase noise spectrum from the residual phase from the subtractor.
3. (ORIGINAL) The system of claim 2, wherein the phase noise spectrum is scaled to dBc/KHz.
4. (ORIGINAL) The system of claim 1, wherein the line fitting processor performs a minimum mean square (MMS) operation on the phase history data to determine the linear phase.
5. (ORIGINAL) The system of claim 1, wherein the signal is from a low noise block (LNB) and the residual phase is substantially a performance measurement of the LNB.
6. (ORIGINAL) The system of claim 1, wherein the signal comprises a satellite television signal.
7. (ORIGINAL) The system of claim 1, wherein the captured data comprises a length based upon a lowest frequency of interest.

8. (ORIGINAL) The system of claim 1, comprising more than one ADC and wherein the captured data comprises in-phase (I) and quadrature (Q) components.
9. (CURRENTLY AMENDED) A method for measuring phase noise, comprising the steps of:
- tuning a signal from a device and converting the signal to a baseband signal;
 - capturing data from the baseband signal;
 - acquire ~~acquiring~~ and track ~~tracking~~ the captured data of the baseband signal to determine symbol timing tracked data;
 - determine ~~determining~~ unwrapped phase history from the symbol timing tracked data;
 - fitting a straight line to the unwrapped phase history data to determine a linear phase; and
 - subtracting the linear phase from the phase history data to produce a residual phase of the signal.
10. (ORIGINAL) The method of claim 9, further comprising determining a phase noise spectrum from the residual phase with a fast Fourier transform (FFT) processor.
11. (ORIGINAL) The method of claim 10, further comprising scaling the phase noise spectrum to dBc/KHz.
12. (ORIGINAL) The method of claim 9, wherein fitting the straight line comprises performing a minimum mean square (MMS) operation on the phase history data to determine the linear phase.
13. (ORIGINAL) The method of claim 9, wherein the signal is from a low noise block (LNB) and the residual phase is substantially a performance measurement of the LNB.
14. (ORIGINAL) The method of claim 9, wherein the signal comprises a satellite television signal.
15. (ORIGINAL) The method of claim 9, wherein the captured data comprises a length based upon a lowest frequency of interest.

16. (ORIGINAL) The method of claim 9, comprising more than one ADC and wherein the captured data comprises in-phase (I) and quadrature (Q) components.
17. (ORIGINAL) A system for measuring phase noise, comprising:
means for tuning a signal from a device and converting the signal to a baseband signal;
means for capturing data from the baseband signal;
means for acquiring and tracking symbol timing of the captured data of the baseband signal;
means for determining unwrapped phase history data from the tracked symbol timing;
means for determining a linear phase by fitting a straight line to the unwrapped phase history data; and
means for subtracting the linear phase from the phase history data to produce a residual phase of the signal.
18. (NEW) The system of claim 17, further comprising means for determining a phase noise spectrum from the residual phase with a fast Fourier transform (FFT) processor.
19. (NEW) The system of claim 18, further comprising means for scaling the phase noise spectrum to dBc/KHz.
20. (NEW) The system of claim 17, wherein the means for fitting the straight line comprises means for performing a minimum mean square (MMS) operation on the phase history data to determine the linear phase.
21. (NEW) The system of claim 17, wherein the signal is from a low noise block (LNB) and the residual phase is substantially a performance measurement of the LNB.
22. (NEW) The system of claim 17, wherein the signal comprises a satellite television signal.
23. (NEW) The system of claim 17, wherein the captured data comprises a length based upon a lowest frequency of interest.

24. (NEW) The system of claim 17, comprising more than one ADC and wherein the captured data comprises in-phase (I) and quadrature (Q) components.